

1. A method for identifying related data in a directed graph, comprising:
 - A. executing the sub-steps of
 - (i) identifying as related data substantially matching a criteria;
 - (ii) identifying as related data that is a direct ancestor of data identified in any of sub-steps (i), (ii) and (iii), and that is not in substantial conflict with the criteria;
 - (iii) identifying as related data (hereinafter "identified descendent") that is a direct descendent of data (hereinafter "identified ancestor") identified as related in any of sub-steps (i), (ii) and (iii), and which identified descendent
 - (a) does not have a named relationship with the identified ancestor substantially matching a relationship named in the criteria, if any, and
 - (b) is not in substantial conflict with the criteria;
 - (c) does not have a named relationship with the identified ancestor matching a relationship the identified ancestor has with a data, if any, as a result of which the identified ancestor was identified during execution of sub-step (ii),
 - B. generating an indication of data identified as related in step (A).
2. The method of claim 1, wherein the criteria specifies a named relationship and a characteristic of that named relationship, and wherein

sub-step (ii) includes comparing at least one of the relationship and the characteristic named in a criteria with any of

attributes of the direct ancestor, and

a relationship between the direct ancestor and any data that descends therefrom,

in order to determine whether the director ancestor is in substantial conflict with the criteria.

3. The method of claim 1, wherein the criteria specifies a named relationship and a characteristic of that named relationship, and wherein

sub-step (iii) includes comparing at least one of the relationship and the characteristic named in a criteria with any of

attributes of the identified descendent, and

a relationship between the identified descendent and any data that descends therefrom,

in order to determine whether the identified descendent ancestor is in substantial conflict with the criteria.
4. The method of claim 1, comprising executing any of the sub-steps of step (A) any of serially, in parallel, or recursively.
5. The method of claim 1, further comprising executing any of the sub-steps of step (A) using a rule-based engine.
6. The method of claim 5, wherein the rule-based engine uses a Rete algorithm to effect execution of one or more of the sub-steps of step (A).
7. The method of claim 1, wherein the directed graph comprises a data flow.
8. The method of claim 7, wherein the data flow comprises any of transactional information and enterprise-related information.
9. The method of claim 1, comprising

executing step (A) with respect to a first data set representing a first portion of the directed graph, and

executing step (A) separately with respect to a second data set representing a second portion of the directed graph.
10. A method of claim 9, wherein the second data set comprises an update to the first data set.

11. A method for identifying related data in a directed graph, comprising:
 - A. executing the sub-steps of
 - (i) identifying as related data substantially matching a criteria;
 - (ii) identifying as related data that is a direct ancestor of data identified as related in any of sub-steps (i) and (ii), and that is not in substantial conflict with the criteria;
 - B. generating an indication of data identified as related in step (A).
12. The method of claim 11, wherein the criteria specifies a named relationship and a characteristic of that named relationship, and wherein

sub-step (ii) includes comparing at least one of the relationship and the characteristic named in a criteria with any of

attributes of the direct ancestor, and

a relationship between the direct ancestor and any data that descends therefrom,

in order to determine whether the director ancestor is in substantial conflict with the criteria.
13. The method of claim 11, wherein the directed graph comprises a data flow.
14. The method of claim 13, wherein the data flow comprises any of transactional information and enterprise-related information.
15. A method for identifying related data in a directed graph, comprising:
 - A. executing the sub-steps of
 - (i) identifying as related data substantially matching a criteria;
 - (ii) identifying as related data (hereinafter “identified descendent”) that is a direct descendent of data (hereinafter “identified ancestor”) identified in any of sub-steps (i) and (ii), and which identified descendent

- (a) does not have a named relationship with the identified ancestor substantially matching a relationship named in the criteria, if any, and
 - (b) is not in substantial conflict with the criteria;
 - (c) does not have a named relationship with the identified ancestor matching a relationship the identified ancestor has with a data, if any, as a result of which the identified ancestor was identified as related.
- 16. The method of claim 15, wherein the criteria specifies a named relationship and a characteristic of that named relationship, and wherein

sub-step (ii) includes comparing at least one of the relationship and the characteristic named in a criteria with any of

attributes of the identified descendent, and

a relationship between the identified descendent and any data that descends therefrom,

in order to determine whether the identified descendent ancestor is in substantial conflict with the criteria.
- 17. The method of claim 15, wherein the directed graph comprises a data flow.
- 18. The method of claim 17, wherein the data flow comprises any of transactional information and enterprise-related information.
- 19. The method of claim 15, comprising

executing step (A) with respect to a first data set representing a first portion of the directed graph, and

executing step (A) separately with respect to a second data set representing a second portion of the directed graph.
- 20. A method of claim 19, wherein the second data set comprises an update to the first data set.

21. A method for identifying related triples in a resource description framework (RDF) data set, comprising
 - A. executing with respect to the data set the sub-steps of
 - (i) identifying as related a triple substantially matching a criteria;
 - (ii) identifying as related a triple that is a direct ancestor of a triple identified as related in any of sub-steps (i), (ii) and (iii), and that is not in substantial conflict with the criteria,

where, for purposes hereof, a triple whose object is the subject of another triple is deemed a direct ancestor of that other triple, and, conversely, where a triple whose subject is the object of another triples is deemed a direct descendent of that other triple; ;
 - (iii) identifying as related a triple (hereinafter “identified descendent”) that is a direct descendent of triple (hereinafter “identified ancestor”) identified as related in any of sub-steps (i), (ii) and (iii), and which identified descendent
 - (a) is not associated with the identified ancestor via a predicate substantially matching a predicate named in the criteria, if any, and
 - (b) is not in substantial conflict with the criteria;
 - (c) is not associated with the identified ancestor via a predicate matching a predicate by which the identified ancestor is associated with a triple, if any, as a result of which the identified ancestor was identified during execution of sub-step (ii),
 - B. generating an indication of triples identified as related in step (A).
22. The method of claim 21, comprising identifying as related a triple that is a sibling of a triple identified as related in sub-step (i) and that is not in substantial conflict with the criteria, where, for purposes hereof, triples that share a common subject are deemed siblings.

23. The method of claim 21, wherein the criteria specifies a predicate and an object associated with that predicate, and wherein sub-step (ii) includes comparing at least one of the predicate and object specified in the criteria with direct ancestor in order to determine whether the director ancestor is in substantial conflict with the criteria.
24. The method of claim 21, wherein the criteria specifies a predicate and an object associated with that predicate, and wherein sub-step (iii) includes comparing at least one of the predicate and object specified in the criteria with the identified descendent in order to determine whether the identified descendent ancestor is in substantial conflict with the criteria.
25. The method of claim 21, comprising executing any of the sub-steps of step (A) any of serially, in parallel, or recursively.
26. The method of claim 21, further comprising executing any of the sub-steps of step (A) using a rule-based engine.
27. The method of claim 26, wherein the rule-based engine uses a Rete algorithm to effect execution of one or more of the sub-steps of step (A).
28. The method of claim 21, wherein the data set comprises a data flow.
29. The method of claim 28, wherein the data flow comprises any of transactional information and enterprise-related information.
30. The method of claim 21, comprising

executing step (A) with respect to a first data set of RDF triples,

executing step (A) separately with respect to a second, related data set of RDF triples.
31. A method of claim 30, wherein the second data set comprises an update to the first data set.
32. A method for identifying related triples in a resource description framework (RDF) data set, comprising

A. executing with respect to the data set the sub-steps of

- (i) identifying as related data substantially matching a criteria;
- (ii) identifying as related a triple that is a direct ancestor of a triple identified in any of sub-steps (i) and (ii), and that is not in substantial conflict with the criteria,

where, for purposes hereof, a triple whose object is the subject of another triple is deemed a direct ancestor of that other triple; a triple whose subject is the object of another triples is deemed a direct descendent of that other triple;

B. generating an indication of data identified as related in step (A).

33. The method of claim 32, wherein the criteria specifies a predicate and an object associated with that predicate, and wherein sub-step (ii) includes comparing at least one of the predicate and object specified in the criteria with direct ancestor in order to determine whether the director ancestor is in substantial conflict with the criteria.

34. The method of claim 33, wherein the data set comprises a data flow.

35. The method of claim 34, wherein the data flow comprises any of transactional information and enterprise-related information.

36. A method for identifying related triples in a resource description framework (RDF) data set, comprising

A. executing with respect to the data set the sub-steps of

- (i) identifying as related data substantially matching a criteria;
- (ii) identifying as related data (hereinafter “identified descendent”) that is a direct descendent of data (hereinafter “identified ancestor”) identified as related in any of sub-steps (i) and (ii), and which identified descendent
 - (a) is not associated with the identified ancestor via a predicate substantially matching a predicate named in the criteria, if any, and
 - (b) is not in substantial conflict with the criteria;

- (c) is not associated with the identified ancestor via a predicate matching a predicate by which the identified ancestor is associated with a triple, if any, as a result of which the identified ancestor was identified as related,
- B. generating an indication of data identified as related in step (A).
- 37. The method of claim 36, wherein the criteria specifies a predicate and an object associated with that predicate, and wherein sub-step (iii) includes comparing at least one of the predicate and object specified in the criteria with the identified descendent in order to determine whether the identified descendent ancestor is in substantial conflict with the criteria.
- 38. The method of claim 36, wherein the data set comprises a data flow.
- 39. The method of claim 38, wherein the data flow comprises any of transactional information and enterprise-related information.
- 40. The method of claim 21, comprising
 - executing step (A) with respect to a first data set of RDF triples,
 - executing step (A) separately with respect to a second, related data set of RDF triples.
- 41. A method of claim 40, wherein the second data set comprises an update to the first data set.
- 42. A method for identifying related data in a directed graph, comprising:
 - A. executing the sub-steps of
 - (i) identifying as related data that is a direct ancestor of data identified in any of sub-steps (i) and (ii), and that is not in substantial conflict with the criteria;
 - (ii) identifying as related data (hereinafter “identified descendent”) that is a direct descendent of data (hereinafter “identified ancestor”) identified as related in any of sub-steps (i) and (ii) and which identified descendent

- (a) does not have a named relationship with the identified ancestor substantially matching a relationship named in the criteria, if any, and
 - (b) is not in substantial conflict with the criteria;
 - (c) does not have a named relationship with the identified ancestor matching a relationship the identified ancestor has with a data, if any, as a result of which the identified ancestor was identified during execution of sub-step (ii),
- B. generating an indication of data identified as related in step (A).